

## Patent Abstracts of Japan

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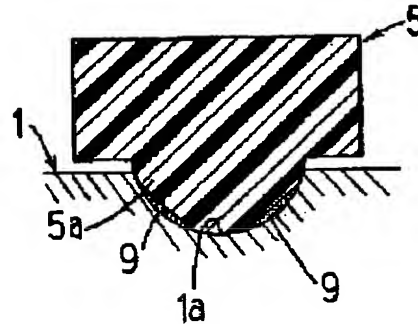
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TITLE : SEALING DEVICE FOR BALL SCREW



**ABSTRACT :** PROBLEM TO BE SOLVED: To form an oil film so as to improve lubricating performance of a sliding contact part by arranging a reservoir part for oil between a spiral groove surface and a projection part surface of a seal member, in a device for sealing an inside of a ball nut by bringing the projection part of the seal member into contact with the spiral groove of a screw shaft.

**SOLUTION:** A reservoir part 9 for oil is arranged between a spiral groove 1a surface of a screw shaft 1 and a projection part 5a surface of a seal member, the surface of the projection part 5a which is brought into contact with the spiral groove 1a of the screw shaft 1 is cut partially, and thereby, oil oozed from the seal member 5 is held on the reservoir part 9. When the screw shaft 1 is relatively rotated with the ball nut, and in the case where the projection part 5a is brought into sliding contact with the spiral groove 1a of the screw shaft 1, an oil film can be surely formed on the sliding contact part, and also lubricating performance is improved on the sliding contact part. Since oil on the sliding contact part is supplied to the part where the ball is brought into sliding contact with spiral groove 1a of the screw shaft 1 and the ball nut, the lubricating performance is improved in the ball nut.

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